

**Abstract**

The invention relates to the use of nucleic acids which code for a (poly)peptide with an intrinsic affinity to plamodesmata, to the production of plants or parts thereof having an increased tolerance against drought and/or fungal infections and/or increased salt concentrations and/or extreme temperature (heat, cold), and to corresponding methods. A plant, a plant tissue or a plant cell is advantageously transfected with the nucleic acid. The nucleic acid preferably encodes a virus-encoded transport protein which, in a particularly preferred embodiment, is a derivative of the pr17 protein with a hydrophilic N-terminal extension.